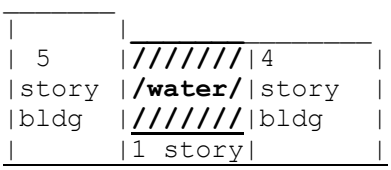
9. Skyline

Program Name: Skyline.java Input File: skyline.dat

As you sit in your class, you begin doodling a 2D city skyline on your graph paper. As it is raining outside, in your 3D world, you wonder what would happen if it rained within this 2D city – assuming that the rain came magically from the top of your paper.

As your curiosity grows, you want to determine how much water would remain if it rained for an excessively long time. The story height of each building in the skyline is represented by an integer in an array. Assume that each building is built right up against the next building, water tight, and that there is an invisible watertight barrier across the front and back of all buildings, (but not at the ends), as tall as the highest structure, that would hold the water in. Also assume that enough water has fallen is to completely fill all spaces between all buildings.

For example, if your buildings were of story height 5, 1, and 4, then there would be 3 stories of water that accumulated between the buildings.



Input

The first integer T will represent how many test cases there are to follow. For each test case, there will be a line containing a single number n, which represents the number of building spaces in your city. The next line contains n integers, which represent the block height of each building, which can range between 0 and 100.

Output

For each test case print out the number of blocks that the water would take up.

Example Input File

```
3
3
5 1 4
5
5 9 3 3 9
7
1 2 3 4 5 6 7
```

Example Output to Screen

```
3
12
0
```